## <u>Claims</u>

What is claimed is:

1. A method of managing execution of requests of a computing environment, said method comprising:

obtaining by a node of the computing environment a request to be processed; and

starting a virtual machine on the node to process the request, said virtual machine being exclusive to the request.

- 2. The method of claim 1, wherein the starting is managed at least in part by another virtual machine of the node.
- 3. The method of claim 1, wherein said obtaining comprises receiving the request by another virtual machine of the node, and wherein the starting comprises starting the virtual machine by the another virtual machine.
- 4. The method of claim 3, wherein the receiving the request comprises receiving the request from a job management service coupled to the another virtual machine.
- 5. The method of claim 1, wherein the starting comprises providing one or more resources to the virtual machine to process the request.
- 6. The method of claim 1, further comprising shutting down the virtual machine, in response to completing the request.
- 7. The method of claim 6, wherein the shutting down comprises returning one or more resources provided to the virtual machine.

- 8. The method of claim 6, wherein said shutting down is managed at least in part by another virtual machine of the node.
- 9. The method of claim 8, wherein said shutting down comprises using by the another virtual machine a communications service to shut down the virtual machine.
- 10. The method of claim 1, wherein said obtaining comprises obtaining by another virtual machine of the node the request to be processed, and wherein the starting comprises:

providing by the another virtual machine to a communications service coupled to said another virtual machine and said virtual machine a start indication indicating that the virtual machine is to be started; and

using the communications service to start the virtual machine.

11. The method of claim 1, further comprising:

determining which node of a plurality of nodes is available to process the request; and

sending the request to the node determined to be available.

- 12. The method of claim 11, wherein said determining comprises obtaining from one or more other virtual machines of one or more nodes of the plurality of nodes information to be used in the determining.
- 13. The method of claim 11, wherein said plurality of nodes include at least one node that is heterogeneous to another node.
- 14. The method of claim 13, wherein the one node is of at least one of a different family and different generation than the another node.

- 15. The method of claim 1, further comprising processing the request by the virtual machine.
- 16. The method of claim 15, further comprising providing from said virtual machine to a job management service information regarding the request being processed.
- 17. The method of claim 1, wherein said virtual machine is a sanitized virtual machine.

18. A method of managing initiation of virtual machines of a computing environment, said method comprising:

determining by one virtual machine of a computing environment that another virtual machine is to be initiated; and

initiating, by the one virtual machine, the another virtual machine.

- 19. The method of claim 18, wherein the determining is in response to receiving by the one virtual machine a request to be processed.
- 20. The method of claim 19, wherein the request is for utilization of machine resources.
- 21. The method of claim 18, wherein said initiating comprises using by the one virtual machine a communications service in initiating the another virtual machine.

22. A method of providing an on-demand infrastructure, said method comprising:

deploying logic on at least one node of a computing environment to automatically provide a virtual machine on-demand.

23. A system of managing execution of requests of a computing environment, said system comprising:

means for obtaining by a node of the computing environment a request to be processed; and

means for starting a virtual machine on the node to process the request, said virtual machine being exclusive to the request.

- 24. The system of claim 23, wherein said means for obtaining comprises means for receiving the request by another virtual machine of the node, and wherein the means for starting comprises means for starting the virtual machine by the another virtual machine.
- 25. The system of claim 23, wherein the means for starting comprises means for providing one or more resources to the virtual machine to process the request.
- 26. The system of claim 23, further comprising means for shutting down the virtual machine, in response to completing the request.
- 27. The system of claim 26, wherein the shutting down is managed at least in part by another virtual machine of the node.
- 28. The system of claim 23, wherein said means for obtaining comprises means for obtaining by another virtual machine of the node the request to be processed, and wherein the means for starting comprises:

means for providing by the another virtual machine to a communications service coupled to said another virtual machine and said virtual machine a start indication indicating that the virtual machine is to be started; and

means for using the communications service to start the virtual machine.

29. The system of claim 23, further comprising:

means for determining which node of a plurality of nodes is available to process the request; and

means for sending the request to the node determined to be available.

- 30. The system of claim 29, wherein said means for determining comprises means for obtaining from one or more other virtual machines of one or more nodes of the plurality of nodes information to be used in the determining.
  - 31. The system of claim 23, further comprising:

means for processing the request by the virtual machine; and

means for providing from said virtual machine to a job management service information regarding the request being processed.

32. A system of managing initiation of virtual machines of a computing environment, said system comprising:

means for determining by one virtual machine of a computing environment that another virtual machine is to be initiated; and

means for initiating, by the one virtual machine, the another virtual machine.

- 33. The system of claim 32, wherein the determining is in response to receiving by the one virtual machine a request to be processed.
- 34. The system of claim 33, wherein the request is for utilization of machine resources.
- 35. The system of claim 32, wherein said means for initiating comprises means for using by the one virtual machine a communications service in initiating the another virtual machine.

36. A system of managing execution of requests of a computing environment, said system comprising:

a node of the computing environment to obtain a request to be processed; and

a virtual machine on the node to process the request, said virtual machine being exclusive to the request.

37. A system of managing initiation of virtual machines of a computing environment, said system comprising:

one virtual machine of a computing environment to determine that another virtual machine is to be initiated; and

the another virtual machine initiated by the one virtual machine.

38. An article of manufacture comprising:

at least one computer usable medium having computer readable program code logic to manage execution of requests of a computing environment, the computer readable program code logic comprising:

obtain logic to obtain by a node of the computing environment a request to be processed; and

start logic to start a virtual machine on the node to process the request, said virtual machine being exclusive to the request.

- 39. The article of manufacture of claim 38, wherein said obtain logic comprises receive logic to receive the request by another virtual machine of the node, and wherein the start logic comprises logic to start the virtual machine by the another virtual machine.
- 40. The article of manufacture of claim 38, wherein the start logic comprises provide logic to provide one or more resources to the virtual machine to process the request.
- 41. The article of manufacture of claim 38, further comprising shut down logic to shut down the virtual machine, in response to completing the request.
- 42. The article of manufacture of claim 41, wherein the shut down is managed at least in part by another virtual machine of the node.

43. The article of manufacture of claim 38, wherein said obtain logic comprises logic to obtain by another virtual machine of the node the request to be processed, and wherein the start logic comprises:

provide logic to provide by the another virtual machine to a communications service coupled to said another virtual machine and said virtual machine a start indication indicating that the virtual machine is to be started; and use logic to use the communications service to start the virtual machine.

44. The article of manufacture of claim 38, further comprising:

determine logic to determine which node of a plurality of nodes is available to process the request; and

send logic to send the request to the node determined to be available.

- 45. The article of manufacture of claim 44, wherein said determine logic comprises obtain logic to obtain from one or more other virtual machines of one or more nodes of the plurality of nodes information to be used in the determining.
  - 46. The article of manufacture of claim 38, further comprising:

    process logic to process the request by the virtual machine; and

    provide logic to provide from said virtual machine to a job management service information regarding the request being processed.

## 47. An article of manufacture comprising:

at least one computer usable medium having computer readable program code logic to manage initiation of virtual machines of a computing environment, the computer readable program code logic comprising:

determine logic to determine by one virtual machine of a computing environment that another virtual machine is to be initiated; and

initiate logic to initiate, by the one virtual machine, the another virtual machine.

- 48. The article of manufacture of claim 47, wherein the determining is in response to receiving by the one virtual machine a request to be processed.
- 49. The article of manufacture of claim 48, wherein the request is for utilization of machine resources.
- 50. The article of manufacture of claim 47, wherein said initiate logic comprises use logic to use by the one virtual machine a communications service in initiating the another virtual machine.

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